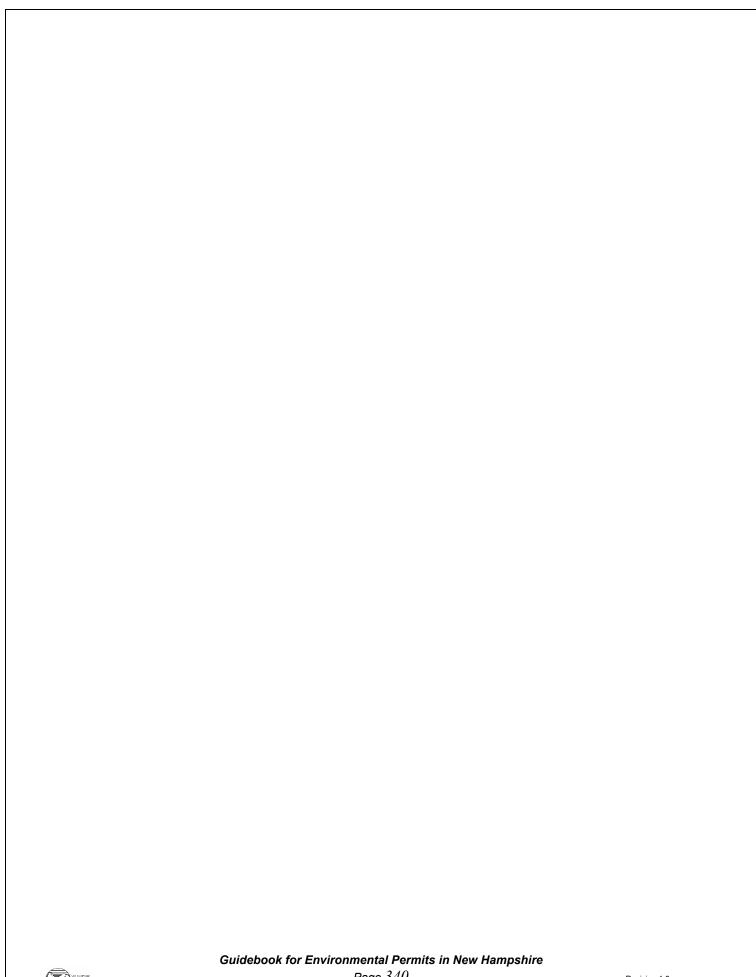
# **Chapter 10:**

# Petroleum Storage/ Site Remediation



2002 Edition







# Chapter 10: Petroleum Storage/Site Remediation

#### Introduction

In 1971, the New Hampshire Legislature enacted RSA 146-A to "cope with the problem of pollution from the spillage or discharge of oil, recognizing the damage resulting...from such pollution" (see RSA 146-"Oil Discharge or Spillage in Surface Water or Groundwater/Declaration of Purpose", http://gencourt.state.nh.us/rsa/html/X/146-A/146-A-1.htm). The statute prohibited the discharge or spillage of oil to surface water or groundwater, or on a land area where oil would ultimately seep into surface water or groundwater, and required spills to be reported and cleaned up. This led to the development of two distinct, but related, programs: reporting and remediation of contaminated sites and regulation of underground storage facilities for petroleum products and hazardous substances. Development of both programs was undertaken by the former New Hampshire Water Supply and Pollution Control Commission ("WSPCC", one of the precursors to the current DES Water Division), based on RSA 146-A and the requirements of Subtitle I of the Resource Conservation and Recovery Act ("RCRA") http://www.epa.gov/swerust1/fedlaws/sttlitxt.htm). RSA 146-A was amended in 1985 to specifically require the regulation of underground storage facilities for petroleum products, and administrative rules were adopted that same year to establish state-of-the-art standards for the design, installation, operation, maintenance, and monitoring of underground storage systems at all non-residential (i.e., commercial/industrial) underground storage tank ("UST") facilities. The companion site remediation program was designed to minimize the impact from releases that have already occurred. In 1986, the Legislature removed the UST provision from RSA 146-A and enacted RSA 146-C ("Underground Storage Facilities", http://gencourt.state.nh.us/rsa/html/indexes/146-C.html) to establish a more extensive regulatory program for USTs. The UST Program was specifically designed to prevent contamination of the land and waters of the state due to accidental or non-sudden (i.e., gradual) releases of stored petroleum products (e.g., motor fuels, heating oils, lubricating oils, and petroleumcontaminated liquids) and hazardous substances as defined by RSA 146-C:1, VII-a (i.e., material defined as a regulated substance under 42 U. S. C. 6991(2)(A) ["Comprehensive Environmental Response, Compensation, and Liability Act/Definitions and Exemptions", http://www4.law.cornell.edu/uscode/42/6991.html] in addition to any material designated as a hazardous substance in RSA 146-C:9, VI-a ["Underground Storage Facilities/Rulemaking", <a href="http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-9.htm">http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-9.htm</a>]. In 1990, DES formally adopted rules to govern the reporting and remediation of oil spills and discharges (see NH CODE ADMIN. RULES Env-Ws 412, "Reporting and Remediation of Oil Discharges", http://www.des.state.nh.us/orcb/412.htm) RSA ("Underground Storage Facilities/Underground Storage Facility Permit http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-4.htm) was amended to require each regulated UST facility to obtain a five-year permit-to-operate from DES (see http://www.des.state.nh.us/orcb/doclist/ustappli.pdf). The State of New Hampshire received final approval for administration of the UST program from the U. S. Environmental Protection Agency on July 1, 1991 (see http://www.epa.gov/swerust1/fsstates.htm), which delegated the responsibility for operating the RCRA Subtitle I UST program to DES in lieu of the federal New Hampshire was the third state in the nation to receive such authority (see government. http://www.epa.gov/swerust1/states/spamap.htm). In 1997, under the authority of RSA 146-A ("Oil Discharge or Spillage in Surface Water or Groundwater/Rulemaking", http://gencourt.state.nh.us/rsa/html/X/146-A/146-A-11-c.htm), DES adopted rules to specifically regulate above-ground petroleum storage facilities (NH CODE ADMIN. RULES Env-Wm 1402. "Control of Aboveground Petroleum Storage Facilities". http://www.des.state.nh.us/orcb/doclist/1402.pdf). Responsibility for these petroleum-related programs is now assigned to the Oil Remediation and Compliance Bureau of the DES Waste Management Division.

#### **Underground Storage of Regulated Substances**

DES regulates underground storage tank ("UST") facilities for storage of regulated substances pursuant to RSA 146-C ("Underground Storage Facilities", <a href="http://gencourt.state.nh.us/rsa/html/indexes/146-C.html">http://gencourt.state.nh.us/rsa/html/indexes/146-C.html</a>). The UST Program operates under NH CODE ADMIN. RULES Env-Wm 1401 ("Underground Storage Facilities", <a href="http://www.des.state.nh.us/orcb/doclist/1401.pdf">http://www.des.state.nh.us/orcb/doclist/1401.pdf</a>), which sets forth the requirements which apply to facilities



that have underground petroleum storage tanks for regulated substances. The term "regulated substance means oil or a hazardous substance. The term "oil", as defined in RSA 146-C:1, XII (which refers to RSA 146-A:2, "Oil Discharge Spillage Surface Water or Groundwater/Definitions". or in http://gencourt.state.nh.us/rsa/html/X/146-A/146-A-2.htm) and used herein, means petroleum products and their by-products of any kind, and in any form including, but not limited to, petroleum, fuel, sludge, crude, oil refuse or oil mixed with wastes and all other liquid hydrocarbons regardless of specific gravity and which are used as motor fuel, lubricating oil, or any oil used for heating or processing. The term "oil' shall not include natural gas, liquefied petroleum gas or synthetic natural gas regardless of derivation or source. The term "hazardous substance" as defined by RSA 146-C:1. VII-a ("Underground Storage Facilities". http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-1.htm) and used herein, means material defined as a regulated substance under 42 U.S.C. 6991(2)(A) ["Comprehensive Environmental Response, Compensation, and Liability Act/Definitions and Exemptions", http://www4.law.cornell.edu/uscode/42/6991.html] in addition to any material designated as a hazardous substance pursuant to RSA 146-C:9, VI-a ["Underground Storage Facilities/Rulemaking", <a href="http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-9.html">http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-9.html</a>. A list of hazardous can be found 40 302.4 substances in (see http://www.access.gpo.gov/nara/cfr/cfrhtml 00/Title 40/40cfr302 00.html).

Specifically, the rules pertain to standards of design, installation, operation, maintenance, and monitoring of UST facilities. These rules apply to all non-residential UST systems that have a total regulated substance storage capacity of more than 110 gallons and non-residential tank systems that have an onpremise use heating oil storage capacity of more than 1,100 gallons. The owner of an UST facility must register it with DES by providing the information required in RSA 146-C:3 ("Underground Storage Facilities/Registration of Underground Storage Facilities", <a href="http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-">http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-</a> 3.htm ) and Env-Wm 1401.06 ("Underground Storage Facilities/Information Required for Registration", http://www.des.state.nh.us/orcb/doclist/1401.pdf) (see http://www.des.state.nh.us/orcb/doclist/registra.pdf). Owners are required to submit in writing any change in facility status (e.g., ownership, equipment, etc.) within ten days of the change. No person is allowed to operate a facility that is not registered with DES. Plans that are submitted with an application must be prepared and stamped by a professional engineer registered to practice in the state of New Hampshire (see <a href="http://www.des.state.nh.us/orcb/doclist/usteng.pdf">http://www.des.state.nh.us/orcb/doclist/usteng.pdf</a>). Once the tank systems have been designed and installed, notification to DES is required at least five days prior to backfilling the tank top and/or piping. At this time, the professional engineer who prepared and stamped the approved plans must forward a letter to DES that certifies that the installation (or the tanks and/or piping) has been completed in accordance with the approved plans. The new system must not be backfilled or placed into service until DES has determined that it complies with all applicable requirements. Finally, DES must be notified within 30 days prior to any UST system closure. An assessment must be completed with the results sent to DES to determine whether any residual contamination present (see http://www.des.state.nh.us/orcb/doclist/clodoc.pdf).

#### **Aboveground Petroleum Storage Program**

The DES Aboveground Petroleum Storage Tank ("AST") Program is designed to prevent releases of oil from aboveground storage systems located throughout the state. Petroleum ASTs are regulated by both the DES Waste Management Division, Oil Remediation and Compliance Bureau ("ORCB") and the New Hampshire Department of Safety, Division of Fire Safety, Office of the State Fire Marshall (603-271-3294). Under the authority of RSA 146-A ("Oil Discharge or Spillage in Surface Water or Groundwater/Rulemaking", <a href="http://gencourt.state.nh.us/rsa/html/X/146-A/146-A-11-c.htm">http://gencourt.state.nh.us/rsa/html/X/146-A/146-A-11-c.htm</a>), DES adopted NH CODE ADMIN. RULES Env-Wm 1402 ("Control of Aboveground Petroleum Storage Facilities", <a href="http://www.des.state.nh.us/orcb/doclist/1402.pdf">http://www.des.state.nh.us/orcb/doclist/1402.pdf</a>) effective April 25, 1997 to regulate facilities with a single AST system having a capacity greater than 660 gallons or with two or more ASTs that have a total storage capacity greater than 1,320 gallons intended for use in the storage, transfer, or distribution of oil. ASTs with a capacity of 10,000 gallons or less that store fuel oil (but not used oil or waste oil) that is used solely for on-premise heating of a structure, including home heating oil tanks, are exempt from the rules. Although home heating oil tanks are exempt from regulation, a program to financially assist homeowners to upgrade such tanks has been authorized under RSA 146-E ("Fuel Oil



Discharge Cleanup Fund", <a href="http://gencourt.state.nh.us/rsa/html/indexes/146-E.html">http://gencourt.state.nh.us/rsa/html/indexes/146-E.html</a>). For more information on this program, refer to the DES Fact Sheet entitled *The Fuel Oil Discharge Cleanup Fund for On-Premise-Use Heating Oil Users* at <a href="http://www.des.state.nh.us/factsheets/oil/oil-7.htm">http://www.des.state.nh.us/factsheets/oil/oil-7.htm</a>, or call the DES Petroleum Remediation Program at (603) 271-3644. Both DES and the Fire Marshall's Office have adopted the National Fire Protection Association ("NFPA") standards outlined in NFPA 30, NFPA 30A, and NFPA 31 for the installation of all ASTs:

- Flammable and Combustible Liquids Code <a href="http://www.nfpa.org/Codes/NFPA">http://www.nfpa.org/Codes/NFPA</a> Codes and Standards/List of NFPA documents/NFPA 30.asp
- Code for Motor Fuel Dispensing Facilities and Repair Garages
  <a href="http://www.nfpa.org/Codes/NFPA">http://www.nfpa.org/Codes/NFPA</a> Codes and Standards/List of NFPA documents/NFPA 30A.asp
- Standard for the Installation of Oil-Burning Equipment

  <a href="http://www.nfpa.org/Codes/NFPA">http://www.nfpa.org/Codes/NFPA</a> Codes and Standards/List of NFPA documents/NFPA 31.asp

The owner of any AST facility subject to Env-Wm 1402.02 ("Control of Aboveground Petroleum Storage Facilities/Applicability", http://www.des.state.nh.us/orcb/doclist/1402.pdf) must register all AST systems at the facility with DES by providing the information required by Env-Wm 1402.05(b) ("Control of Aboveground Petroleum Storage Facilities/Registration"). Both existing and new AST systems must be registered. All plans must be prepared and certified by a professional engineer licensed to practice in the state of New Hampshire (see AST design engineers list at http://www.des.state.nh.us/orcb/doclist/asteng.pdf). Prior to installing a new or substantially modified AST facility, the owner must submit an application and engineering plans and specifications which accurately address the requirements of Env-Wm 1402. Upon review of the application by DES and the subsequent issuance of an approval to construct the system, installation can commence. Before the system can be placed in operation, DES must be contacted to arrange for an inspection to determine if the facility has been installed in accordance with the approved plans and specifications. Once the installation is inspected, approved, and a current registration is on file with DES, a letter is issued granting the owner permission to fully operate the system. All AST systems must be fitted with an overfill protection system in the form of gauge with an independent audible and visible high-level alarm http://www.des.state.nh.us/factsheets/oil/oil-22.htm), tank markings showing the tank number, identification of its contents (e.g., diesel, gasoline, etc.), the safe fill volume or fill height, and the appropriate national fire rating symbol as established by NFPA-704, known as the "NFPA four-color hazard identity symbol" (see http://www.des.state.nh.us/factsheets/oil/oil-21.htm). Review the National Fire Protection Association's manual, Standard System for the Identification of the Hazards of Materials for Emergency Response, at http://www.nfpa.org/Codes/NFPA Codes and Standards/List of NFPA documents/NFPA 704.asp. AST facility also must have a Spill Prevention Control and Countermeasure ("SPCC") Plan in place (see http://www.des.state.nh.us/orcb/doclist/spcc.pdf and http://www.epa.gov/oilspill/spcc/).

#### Oil Release/Site Remediation/Redevelopment

Sites contaminated by oil releases that do not qualify for federal oversight are regulated under RSA 146-A ("Oil Surface Water Groundwater", Discharge or Spillage in or http://gencourt.state.nh.us/rsa/html/indexes/146-A.html) and related statutes and rules relative to groundwater protection (see. e.g., RSA 485-C, "Groundwater Protection Act", http://gencourt.state.nh.us/rsa/html/indexes/485-C.html, and NH CODE ADMIN. RULES Env-Wm 1403, "Groundwater Groundwater Management and Release Detection Permits". http://www.des.state.nh.us/orcb/doclist/wm1403.pdf). Hundreds of oil spill sites across the state that have been addressed by this process, ranging in complexity from the cleanup of one-time spills to long-term remediation at historic, long-term leakage sites. DES offers limited funding for eligible projects through its reimbursement fund programs (see http://www.des.state.nh.us/orcb/doclist/fundsum.pdf). Redevelopment and reuse at some of these sites has been facilitated by RSA 147-F; the DES "Brownfields Program" (see http://gencourt.state.nh.us/rsa/html/indexes/147-F.html and http://www.des.state.nh.us/hwrb/hwrbbfld.htm). The DES Brownfields Program is designed to provide incentives for both site cleanup and redevelopment of contaminated properties that have been underused or abandoned due to contamination, but only persons who



did not cause the contamination are eligible to participate. Cleanup at these sites follows guidelines outlined by DES's *Risk Characterization and Management Policy* (see <a href="http://www.des.state.nh.us/orcb/doclist/explanat.pdf">http://www.des.state.nh.us/orcb/doclist/explanat.pdf</a>), much of which is being adopted as NH CODE ADMIN. RULES Env-Wm 1600. Once the site has been remediated, DES may determine that certain Activity and Use Restrictions ("AURs") will be needed to maintain the integrity of the cleanup work (see <a href="http://www.des.state.nh.us/orcb/doclist/aurlist.pdf">http://www.des.state.nh.us/orcb/doclist/aurlist.pdf</a>). A final remedial end point for the site will be signaled by the issuance of a *Certificate of Completion* by DES (see <a href="http://www.des.state.nh.us/factsheets/hw/hw-1.htm">http://www.des.state.nh.us/factsheets/hw/hw-1.htm</a>) and/or the issuance of a *Certificate of No Further Action* by the New Hampshire Department of Justice (see <a href="http://www.des.state.nh.us/orcb/doclist/versus.pdf">http://www.des.state.nh.us/orcb/doclist/versus.pdf</a> for comparison and criteria).

#### **Petroleum Reimbursement Fund Program**

The New Hampshire Petroleum Reimbursement Funds are a financial assistance program for owners of petroleum storage facilities who incur cleanup costs when a release (spill or leak) occurs (see http://www.des.state.nh.us/orcb/doclist/progsum.pdf). The program is comprised of three separate cleanup reimbursement funds authorized by state statutes: RSA 146-D, "Oil Discharge and Disposal Cleanup Fund", http://gencourt.state.nh.us/rsa/html/indexes/146-D.html; RSA 146-E, "Fuel Oil Discharge Cleanup Fund, http://qencourt.state.nh.us/rsa/html/indexes/146-E.html; and RSA 146-F, "Motor Oil Discharge Cleanup Fund", http://gencourt.state.nh.us/rsa/html/indexes/146-F.html). The program provides coverage for underground storage facilities storing motor fuel, above-ground storage facilities used for the storage and distribution of motor fuel or fuel oil, storage facilities for motor oil or used motor oil, and facilities which store fuel oil for onpremise heating (including residential properties) (see http://www.des.state.nh.us/orcb/doclist/opufpol.pdf). RSA 146-G also establishes a fund ("Gasoline Remediation and Elimination of Ethers Fund", http://gencourt.state.nh.us/rsa/html/indexes/146-G.html) to reimburse costs related to gasoline spills, including those involving Methyl-tert-Butyl-Ether ("MtBE") contamination. Applications for reimbursement should be submitted using the DES Request for Reimbursement Authorization form (see http://www.des.state.nh.us/orcb/doclist/fundform 1.pdf). The funds are administered by the Oil Fund Disbursement Board ("ODB"), composed of members representing the New Hampshire Legislature, the petroleum industry. State agencies, and the general public, which operates under the authority of RSA 146-D:5, Discharge Disposal Cleanup Fund/Board **Powers** ("Oil and and Duties". http://gencourt.state.nh.us/rsa/html/X/146-D/146-D-5.htm) and in accordance with NH CODE ADMIN. RULES Odb 200-600 ("Rules for Reimbursement/Disbursement from the Petroleum Cleanup Funds under RSA 146-D, RSA 146-E, RSA 146-F, and RSA 146-G", http://www.des.state.nh.us/orcb/doclist/fundrule.pdf).

#### Summary

The Oil Remediation and Compliance Bureau of the DES Waste Management Division is responsible for administering both the Aboveground Petroleum Storage Facility Program and Underground Petroleum Storage Facility Program. It also coordinates the various reimbursement programs designed to facilitate the completion of petroleum cleanup projects and assist in the financing of such activities for both businesses and homeowners. The Oil Fund Disbursement Board meets regularly to decide eligibility and grant awards to deserving projects (see <a href="http://www.des.state.nh.us/orcb/costprog.htm">http://www.des.state.nh.us/orcb/costprog.htm</a>). Appeals of UST and AST permit decisions or orders issued for violations of program requirements should be directed to the Waste Management Council at <a href="http://www.des.state.nh.us/councils/#waste">http://www.des.state.nh.us/councils/#waste</a>.

# **Chapter Contents**

- ✓ Aboveground Petroleum Storage Facility Registration
- ✓ Construction of a New or Substantially Modified Aboveground Petroleum Storage Tank Facility/Letter of Approval



- ✓ Underground Storage Tank Facility Registration
- ✓ Construction of a New or Substantially Modified Underground Storage Tank Facility/Letter of Approval
- ✓ Underground Storage Tank Facility Permit-to-Operate
- ✓ Underground Storage Tank Closure Notification



# **Organizational Chart**

New Hampshire Department of Environmental Services

Office of the Commissioner

Air Resources Division

Waste Management Division

Water Division

#### Commissioner

- Public
  Information
  and
  Permitting
  Unit
- Administrative Services Unit
- Laboratory Unit
- Information Resources Management Unit
- Planning Unit
- New
   Hampshire
   Geological
   Survey
- Legal Unit
- Human
   Resources Unit

#### **Director**

Compliance Bureau

Stationary Source Management Bureau

Technical Services Bureau

#### **Director**

Hazardous Waste Compliance Section

Hazardous Waste Remediation Bureau

### Oil Remediation Compliance Bureau

Planning Bureau

Solid Waste Management Bureau

Special Investigations Section

#### **Director**

Watershed Management Bureau

> Dam Bureau

Wastewater Engineering Bureau

#### Land Resources Management Progam

- Wetlands
  Bureau
- Water Quality Engineering Section
- Subsurface Systems Bureau
- Water Supply Engineering Bureau

Winnipesaukee River Basin Bureau

Petroleum Storage/ Site Remediation Permitting



## **Aboveground Petroleum Storage Facility Registration**

Introduction: The DES Aboveground Petroleum Storage Tank ("AST") Program is designed to prevent releases of oil from AST systems located throughout the state of New Hampshire. Petroleum ASTs are regulated by both DES, through its Waste Management Division, Oil Remediation and Compliance Bureau ("ORCB"), and the New Hampshire Department of Safety, through its Division of Fire Safety, Office of the State Fire Marshall (telephone: 603-271-3294). DES adopted NH CODE ADMIN. RULE Env-Wm 1402 ("Control of Aboveground Petroleum Storage Tank Facilities (AST)", http://www.des.state.nh.us/orcb/doclist/1402.pdf) to regulate facilities with a single AST system having a capacity greater that 660 gallons, as well as those facilities that include two or more ASTs that have a total storage capacity greater than 1,320 gallons intended for use in the storage, transfer, or distribution of oil\*. These rules exempt those ASTs with a capacity of 10,000 gallons or less that store fuel oil (but not used oil or waste oil) that is used solely for on-premise heating of a structure. This exemption includes home heating oil tanks. Both DES and the State Fire Marshall's Office have adopted the National Fire Protection Association ("NFPA") standards outlined in NFPA 30, NFPA 30A, installation of all NFPA (see below) for the ASTs in New Hampshire http://www.nfpa.org/Home/index.asp). DES requires the owner of any AST facility subject to Env-Wm 1402.02 to register all AST systems at the facility by completing the information required by Env-Wm 1402.05(b). Both new and existing AST systems must be registered with DES. All plans must be prepared and certified by a professional engineer licensed to practice in the state of New Hampshire (see AST design engineers list at http://www.des.state.nh.us/orcb/doclist/asteng.pdf). All AST systems must be fitted with an overfill protection system in the form of a gauge with an independent audible and visible high-level alarm (see http://www.des.state.nh.us/factsheets/oil/oil-22.htm), tank markings showing the tank number, identification of its contents (e.g., diesel, gasoline, etc.), the safe fill volume or fill height, and the appropriate national fire rating symbol as established by NFPA-704 known as the "NFPA four-color hazard identity symbol" (see http://www.des.state.nh.us/factsheets/oil/oil-21.htm). Review the National Fire Protection Association's manual, Standard System for the Identification of the Hazards of Materials for Emergency Response, at http://www.nfpa.org/Codes/NFPA Codes and Standards/List of NFPA documents/NFPA 704.asp for more details. All AST facilities must have a Spill Prevention Control and Countermeasure ("SPCC") Plan in place (see http://www.des.state.nh.us/orcb/doclist/spcc.pdf and http://www.epa.gov/oilspill/spcc/).

\*Note: The term "oil", as defined by RSA 146-A:2, III ("Oil Discharge or Spillage in Surface Water or Groundwater/Definitions", <a href="http://gencourt.state.nh.us/rsa/html/X/146-A/146-A-2.htm">http://gencourt.state.nh.us/rsa/html/X/146-A/146-A-2.htm</a>) and used herein, means petroleum products and their by-products of any kind, and in any form including, but not limited to, petroleum, fuel, sludge, crude, oil refuse or oil mixed with wastes and all other liquid hydrocarbons regardless of specific gravity and which are used as motor fuel, lubricating oil, or any oil used for heating or processing. The term "oil' shall not include natural gas, liquefied petroleum gas or synthetic natural gas regardless of derivation or source."

Average number of registrations submitted annually: Approximately 70

Fees: None

Estimated processing time after application is deemed "complete": 30 days

Registration duration: Indefinite

**Registration transferability:** When a transfer of ownership of an AST facility occurs, the new owner must file an amended registration form with DES no later than 30 days after the transfer (see <a href="http://www.des.state.nh.us/orcb/doclist/astreg.pdf">http://www.des.state.nh.us/orcb/doclist/astreg.pdf</a>).

**Registration modification:** If a change in use of the AST system or use of the property occurs at the facility, the owner must both register the facility with DES within 30 days following its change in use. If the AST system



is to be taken out of use, removed, or dismantled, the owner must submit an amended registration form within 30 days after taking such action.

**Registration renewal:** A renewal of this registration is required only when a change of ownership occurs, or when the amount of storage capacity changes.

**State statute:** RSA 146-A ("Oil Discharge or Spillage in Surface Water or Groundwater", <a href="http://gencourt.state.nh.us/rsa/html/indexes/146-A.html">http://gencourt.state.nh.us/rsa/html/indexes/146-A.html</a>)

Federal law: 33 U. S. C. 2702 to 2761 ("The Oil Pollution Act of 1990", http://www4.law.cornell.edu/uscode/33/ch40.html)

- **N. H. Code of Administrative Rules:** Env-Wm 1402 ("Control of Aboveground Petroleum Storage Facilities", <a href="http://www.des.state.nh.us/orcb/doclist/1402.pdf">http://www.des.state.nh.us/orcb/doclist/1402.pdf</a>)
- **U. S. Code of Federal Regulations:** 40 CFR Chapter I, Part 112 ("Environmental Protection Agency/Oil Pollution Prevention", <a href="http://www.access.gpo.gov/nara/cfr/cfrhtml">http://www.access.gpo.gov/nara/cfr/cfrhtml</a> 00/Title 40/40cfr112 main 00.html)

**Appeals body:** Waste Management Council at RSA 21-O:9 ("Department of Environmental Services/Waste Management Council", <a href="http://gencourt.state.nh.us/rsa/html/l/21-O/21-O-9.htm">http://gencourt.state.nh.us/rsa/html/l/21-O/21-O-9.htm</a>; see also <a href="http://www.des.state.nh.us/councils/#waste">http://www.des.state.nh.us/rules/env-wmc200.pdf</a> and <a href="http://www.des.state.nh.us/councils/#waste">http://www.des.state.nh.us/councils/#waste</a>)

Additional information: N. H. DES, Oil Remediation Compliance Bureau, (603) 271-3644

N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

U. S. EPA, Office of Underground Storage Tanks, (617) 918-1311

National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02269-

9101 Telephone: (617) 770-3000; fax: 617-770-0700

For reference links to NFPA 30, 30A, 31, and 704, see -

- Flammable and Combustible Liquids Code
  http://www.nfpa.org/Codes/NFPA Codes and Standards/List of NFPA documents/NFPA 30.asp
- Code for Motor Fuel Dispensing Facilities and Repair Garages
   http://www.nfpa.org/Codes/NFPA Codes and Standards/List of NFPA documents/NFPA 30A.asp
- Standard for the Installation of Oil-Burning Equipment

  <a href="http://www.nfpa.org/Codes/NFPA">http://www.nfpa.org/Codes/NFPA</a> Codes and Standards/List of NFPA documents/NFPA 31.asp</a>
- Standard System for the Identification of the Hazards of Materials for Emergency Response http://www.nfpa.org/Codes/NFPA Codes and Standards/List of NFPA documents/NFPA 704.asp



## **Aboveground Petroleum Storage Facility Registration** – Work Sheet

<u>Key Qualifier Questions:</u> Does your facility have at least one aboveground tank system with the capacity to store greater than 660 gallons of petroleum products, other than for on-premise heating oil? Does your facility have one or more aboveground tank systems with a combined capacity to store greater than 1,320 gallons of petroleum products, other than for on-premise heating oil? Does your facility have one or more aboveground tank systems storing on-premise heating oil with a combined capacity of greater than 10,000 gallons?

Note: The term "oil", as defined by RSA 146-A:2, III ("Oil Discharge or Spillage in Surface Water or Groundwater/Definitions", <a href="http://gencourt.state.nh.us/rsa/html/X/146-A/146-A-2.htm">http://gencourt.state.nh.us/rsa/html/X/146-A/146-A-2.htm</a>) and used herein, means petroleum products and their by-products of any kind, and in any form including, but not limited to, petroleum, fuel, sludge, crude, oil refuse or oil mixed with wastes and all other liquid hydrocarbons regardless of specific gravity and which are used as motor fuel, lubricating oil, or any oil used for heating or processing. The term "oil" does not include natural gas, liquefied petroleum gas or synthetic natural gas regardless of derivation or source.

#### What must you do to apply?

- Refer to NH CODE ADMIN. RULES Env-Wm 1402.05(b), ("Control of Aboveground Petroleum Storage Facilities/Registration", http://www.des.state.nh.us/orcb/doclist/1402.pdf)
- Obtain a Registration of Aboveground Bulk Storage Facility from the DES Oil Remediation and Compliance Bureau ("ORCB"), the DES Public Information Center, or online at <a href="http://www.des.state.nh.us/orcb/doclist/astreg.pdf">http://www.des.state.nh.us/orcb/doclist/astreg.pdf</a>.
- Provide the name, address, and daytime telephone number of the facility owner.
- Provide the location of the AST system and explain its intended use.
- Provide the name, job title, address, and telephone number of the operator in charge of the AST systems at the facility.
- Provide a description of each AST system at the facility, including:
  - Status of the AST
  - o Date of AST system installation
  - Total capacity of the AST
  - Construction material of the AST
  - Construction material and location of the piping
  - Contents of the AST
  - Description of AST system supports, if any, and height above grade
- Include a statement regarding whether the AST system is out-of-service, as defined by Env-Wm 1402.03 ("Control of Aboveground Petroleum Storage Facilities", http://www.des.state.nh.us/orcb/doclist/1402.pdf), or has been removed or dismantled.
- Provide a plan view dimensioned drawing of the facility of sufficient detail to locate the ASTs with respect to property lines and any buildings or other structures located on the property.
- Indicate the date of the current Spill Prevention Control and Countermeasure ("SPCC") Plan for the facility (see http://www.des.state.nh.us/orcb/doclist/spcc.pdf and http://www.epa.gov/oilspill/spcc/)
- The facility owner must sign and date the registration form before submittal to DES.
- Submit the application and all supporting information to: Oil Remediation and Compliance Bureau, Waste Management Division, New Hampshire Department of Environmental Services, P. O. Box 95, 6 Hazen Drive, Concord, New Hampshire 03302-0095. Telephone: (603) 271-3644; fax: (603) 271-2181; or online: http://www.des.state.nh.us/orcb/astprog.htm

#### What types of projects require this registration?

All single, aboveground, non-on-premise, heating oil tank systems greater than 660 gallons



<ul> <li>All multiple, aboveground, non-on-premise, heating oil tank systems greater than 1,320 gallons</li> <li>All on-premise, heating oil, aboveground tank systems greater than 10,000 gallons</li> </ul>				
If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at <a href="mailto:tdrew@des.state.nh.us">tdrew@des.state.nh.us</a> or at (603) 271-3306.				
Guidebook for Environmental Permits in New Hampshire				



# Construction of a New or Substantially Modified Petroleum Aboveground Storage Tank Facility/Letter of Approval

Introduction: To help insure that new aboveground ("AST") facilities are designed and installed properly and to minimize the potential for petroleum discharges to the environment, an approval from DES to construct certain new or replacement AST systems must be obtained. A significant portion of the AST regulations deals with the proper installation of new AST facilities (see NH CODE ADMIN. RULES Env-Wm 1402, "Control of Aboveground Storage Facilities", http://www.des.state.nh.us/orcb/doclist/1402.pdf). construction or installation of a new or replacement AST system with an oil storage capacity of more than 660 gallons of any oil product\* or other virgin heating oil for on-premise use, or with the capacity to store more than 10,000 gallons of heating oil for on-premise use, the owner must submit to DES complete plans and specifications that have been prepared and stamped by a registered professional engineer licensed to practice in the state of New Hampshire (see http://www.des.state.nh.us/orcb/doclist/asteng.pdf). The DES application form can be used as a checklist (see http://www.des.state.nh.us/orcb/doclist/newappli.pdf) to identify the information which must be provided regarding the tanks, the product stored, its piping, secondary containment, overfill protection, interstitial leak monitoring, traffic protection barriers, transfer pads, dispensers and any other aspects of the tank system. Plans and specifications must include a scaled site plan depicting the tank facility as it relates to buildings, traffic areas, surface water, drainage, water supply wells, property boundaries, and other features at the site. Following the submission of the application form, plans and specifications, a review is conducted by DES. If the information is incomplete or the information does not meet the intent of the administrative rules, a letter listing those deficiencies will be sent to the owner and applicant. Once the application is approved, a letter that grants the approval to construct the specific facility is sent to the owner along with copies to the applicant and the local fire department. Construction can begin upon receipt of that approval and after obtaining any and all applicable local permits. Before the system can be placed in operation. DES must be contacted to arrange for an inspection to determine if the facility has been installed in accordance with the approved plans and specifications. Once the installation is inspected, approved, and a current registration is on file with DES, a letter is issued granting the owner permission to fully operate the system.

Note: The term "oil", as defined by RSA 146-A:2, III ("Oil Discharge or Spillage in Surface Water or Groundwater/Definitions", <a href="http://gencourt.state.nh.us/rsa/html/X/146-A/146-A-2.htm">http://gencourt.state.nh.us/rsa/html/X/146-A/146-A-2.htm</a>) and used herein, means petroleum products and their by-products of any kind, and in any form including, but not limited to, petroleum, fuel, sludge, crude, oil refuse or oil mixed with wastes and all other liquid hydrocarbons regardless of specific gravity and which are used as motor fuel, lubricating oil, or any oil used for heating or processing. The term "oil' shall not include natural gas, liquefied petroleum gas or synthetic natural gas regardless of derivation or source."

Average number of construction approvals issued annually: 35

Fees: None

Estimated processing time after application is deemed "complete": 45 days

**Approval duration:** 1 year to complete construction

**Approval transferability:** An approval to construct or substantially modify an AST facility is transferred by submitting a new application and cover letter. If there are no changes to the design, plans and specifications are not required to be submitted.

**Approval modification:** An owner must not cause or allow a substantial design change that is not in accordance with the approved plans and all terms of the conditions of the approval. Minor changes may be



handled by a telephone call and follow-up fax or mailing of the changes. All substantial changes must be approved in writing by the design engineer of record and resubmitted to DES for approval.

**Approval renewal:** An owner may request a waiver for the one-year expiration period in accordance with Env-Wm 1402.36

**State statute:** RSA 146-A ("Oil Discharge or Spillage in Surface Water or Groundwater", <a href="http://gencourt.state.nh.us/rsa/html/indexes/146-A.html">http://gencourt.state.nh.us/rsa/html/indexes/146-A.html</a>)

**N. H. Code of Administrative Rules:** Env-Wm 1402 ("Control of Aboveground Petroleum Storage Facilities", http://www.des.state.nh.us/orcb/doclist/1402.pdf)

**Appeals body:** Waste Management Council at RSA 21-O:9 ("Department of Environmental Services/Waste Management Council", <a href="http://gencourt.state.nh.us/rsa/html/l/21-O/21-O-9.htm">http://gencourt.state.nh.us/rsa/html/l/21-O/21-O-9.htm</a>; see also <a href="http://www.des.state.nh.us/councils/#waste">http://www.des.state.nh.us/rules/env-wmc200.pdf</a> and <a href="http://www.des.state.nh.us/councils/#waste">http://www.des.state.nh.us/councils/#waste</a>)

Additional information: N. H. DES, Oil Remediation and Compliance Bureau, (603) 271-3644

N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876 N. H. Dept. of Safety, Office of the State Fire Marshal, (603) 271-3294

For reference links to NFPA 30, 30A, and 31, see:

- √ http://www.nfpa.org/Codes/NFPA Codes and Standards/List of NFPA documents/NFPA 30.asp
- √ http://www.nfpa.org/Codes/NFPA Codes and Standards/List of NFPA documents/NFPA 30A.asp
- ✓ http://www.nfpa.org/Codes/NFPA Codes and Standards/List of NFPA documents/NFPA 31.asp



# Construction of a New or Substantially Modified Petroleum Aboveground Storage Tank Facility/Letter of Approval – Work Sheet

<u>Key Qualifier Question:</u> Are you planning to install or replace an aboveground petroleum storage tank system with the capacity to store more than 660 gallons of any oil product\* other than virgin heating oil for onpremise use, or are you planning to install or replace an aboveground petroleum storage tank system with the capacity to store more than 10,000 gallons of heating oil for on-premise use?

\*Note: The term "oil", as defined by RSA 146-A:2, III ("Oil Discharge or Spillage in Surface Water or Groundwater/Definitions", <a href="http://gencourt.state.nh.us/rsa/html/X/146-A/146-A-2.htm">http://gencourt.state.nh.us/rsa/html/X/146-A/146-A-2.htm</a>) and used herein, means petroleum products and their by-products of any kind, and in any form including, but not limited to, petroleum, fuel, sludge, crude, oil refuse or oil mixed with wastes and all other liquid hydrocarbons regardless of specific gravity and which are used as motor fuel, lubricating oil, or any oil used for heating or processing. The term "oil" does not include natural gas, liquefied petroleum gas or synthetic natural gas regardless of derivation or source.

#### What must you do to apply?

- Refer to NH CODE ADMIN. RULE Env-Wm 1402.17, "Control of Aboveground Petroleum Storage Facilities/Requirements for Approval of AST Systems", http://www.des.state.nh.us/orcb/doclist/1402.pdf)
- Obtain an Application for the Construction of New or Substantially Modified Petroleum Aboveground Storage Tank (AST) Facility from the DES Oil Remediation and Compliance Bureau ("ORCB"), DES Public Information Center, or online at <a href="http://www.des.state.nh.us/orcb/doclist/newappli.pdf">http://www.des.state.nh.us/orcb/doclist/newappli.pdf</a>.
- Provide the facility location name, address, tax map and lot number, contact person, and telephone number.
- Provide the facility owner's name, address and phone number.
- Prepare an accurate scaled diagram (22-inch x 34-inch) as a facility plan which includes the information on that plan that is requested in section I of the application.
- Use the application as a check list and provide the basic tank information such as:
  - Capacity
  - Configuration (horizontal or vertical) and dimensions
  - Product to be stored.
  - Manufacturer
  - Foundation type
  - Whether it is double-walled or single-walled tank
- Prepare detailed information regarding the piping to be used, including whether it is a suction or pressurized system, the size (diameter) and material of construction, a description of piping supports, cathodic protection for buried steel piping, details on transition sumps, check valves and anti-siphoning devices.
- Describe and diagram what method of secondary containment is to be used for the tank system.
- Describe and diagram what method of overfill protection is to be used for the tank system (see <a href="http://www.des.state.nh.us/factsheets/oil/oil-22.htm">http://www.des.state.nh.us/factsheets/oil/oil-22.htm</a>), including:
  - o The make and model of the liquid level gauge
  - o The make and model of the high level alarm
- Describe the interstitial leak-monitoring device to be used (if applicable).
- Indicate that the tanks will be properly labeled including the "safe fill height" (see <a href="http://www.des.state.nh.us/factsheets/oil/oil-21.htm">http://www.des.state.nh.us/factsheets/oil/oil-21.htm</a>).



- Make sure the plan and supporting materials are stamped, signed, and dated by a professional engineer licensed to practice in the state of New Hampshire (see http://www.des.state.nh.us/orcb/doclist/asteng.pdf).
- Provide a copy of the completed application to the local fire chief.
- Submit the application form and all supporting information to: Oil Remediation and Compliance Bureau, Waste Management Division, New Hampshire Department of Environmental Services, P. O. Box 95, 6 Hazen Drive, Concord, New Hampshire 03302-0095. Telephone: (603) 271-3644; fax: (603) 271-2181; or online: http://www.des.state.nh.us/orcb/astprog.htm
- Before the system can be placed in operation, DES must be contacted to arrange for an inspection to
  determine if the facility has been installed in accordance with the approved plans and specifications.
  Once the installation is inspected, approved, and a current registration is on file with DES, a letter is
  issued granting the owner permission to fully operate the system.

#### What types of projects require this approval?

- ❖ All new or replacement aboveground petroleum storage tanks greater than 660 gallons capacity (other than heating oil tanks for on premise use)
- ❖ All new or replacement petroleum storage tanks greater than 10,000-gallon capacity used to store heating oil for on-premise use

If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at tdrew@des.state.nh.us or at (603) 271-3306.



## **Underground Storage Tank Facility Registration**

Introduction: DES regulates underground storage tank ("UST") facilities for storage of regulated substances pursuant to RSA 146-C.\* The UST Program is specifically designed to prevent contamination of the land and waters of the state due to accidental or non-sudden (*i.e.*, gradual) releases of stored petroleum products (e.g., motor fuels, heating oils, lubricating oils, and petroleum-contaminated liquids) and hazardous substances. Included in this program is the registration of UST facilities. DES regulates the underground storage of gasoline and other motor fuels in UST systems possessing a storage capacity of more than 110 gallons. Similarly, DES also requires registration of UST facilities at which heating oil and other regulated petroleum products are stored in quantities of more than 1,100 gallons. RSA 146-C:3, I ("Underground Storage Facilities/Registration of Underground Storage Facilities", <a href="http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-3.htm">http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-3.htm</a>) requires the owner of an UST facility to register the facility with DES. As part of the rules adopted by DES for this program (see NH CODE ADMIN. RULES Env-Wm 1401 ("Underground Storage Facilities," <a href="http://www.des.state.nh.us/orcb/doclist/1401.pdf">http://www.des.state.nh.us/orcb/doclist/1401.pdf</a>), Env-Wm 1401.06 identifies the information that must be submitted on a form provided by DES (*Registration for Underground Storage Tank Systems*, <a href="http://www.des.state.nh.us/orcb/doclist/registra.pdf">http://www.des.state.nh.us/orcb/doclist/registra.pdf</a>).

\*Note: The term "regulated substance" means oil or a hazardous substance. The term "oil", as defined in RSA 146-C:1, XII (which refers to RSA 146-A:2, III, "Oil Discharge or Spillage in Surface Water or Groundwater/Definitions", http://gencourt.state.nh.us/rsa/html/X/146-A/146-A-2.htm) and used herein, means petroleum products and their by-products of any kind, and in any form including, but not limited to, petroleum, fuel, sludge, crude, oil refuse or oil mixed with wastes and all other liquid hydrocarbons regardless of specific gravity and which are used as motor fuel, lubricating oil, or any oil used for heating or processing. The term "oil' shall not include natural gas, liquefied petroleum gas or synthetic natural gas regardless of derivation or source. The term "hazardous substance" as defined by RSA 146-C:1, VII-a ("Underground Storage Facilities", http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-1.htm) and used herein, means material defined as a regulated substance under 42 U.S.C. 6991(2)(A) ["Comprehensive Environmental Response, Compensation, and Liability Act/Definitions and Exemptions", http://www4.law.cornell.edu/uscode/42/6991.html] in addition to any material designated as a hazardous substance pursuant to RSA 146-C:9, VI-a ["Underground Storage Facilities/Rulemaking", http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-9.htm]. A list of hazardous substances be found 40 CFR 302.4 can in (see http://www.access.gpo.gov/nara/cfr/cfrhtml 00/Title 40/40cfr302 00.html).

Average number of registrations received annually: Approximately 200

Fees: None

Estimated processing time after registration is deemed "complete": 1-2 days

**Registration duration:** The existing registration remains valid so long as the information is accurate and current on the registration form on file with DES.

**Registration transferability:** When a transfer of ownership of any underground petroleum storage facility is contemplated, the new owner must file an amended registration form with DES within ten days of the transfer (see <a href="http://www.des.state.nh.us/orcb/doclist/registra.pdf">http://www.des.state.nh.us/orcb/doclist/registra.pdf</a>).

**Registration modification:** Owners must submit any changes in facility status in writing to DES, such as ownership or equipment, within ten days of the change(s). For new systems, or substantial modifications to existing systems, a new or amended registration form must be submitted to DES at the time of final inspection of the system (see <a href="http://www.des.state.nh.us/orcb/doclist/registra.pdf">http://www.des.state.nh.us/orcb/doclist/registra.pdf</a>).



Registration renewal: None

**State statute:** RSA 146-C ("Underground Storage Facilities", <a href="http://gencourt.state.nh.us/rsa/html/indexes/146-0.html">http://gencourt.state.nh.us/rsa/html/indexes/146-0.html</a>)

C.html)

N. H. Code of Administrative Rules: Env-Wm 1401 ("Underground Storage Facilities",

http://www.des.state.nh.us/orcb/doclist/1401.pdf)

**Appeals body:** Waste Management Council at RSA 21-O:9 ("Department of Environmental Services/Waste Management Council", <a href="http://gencourt.state.nh.us/rsa/html/l/21-O/21-O-9.htm">http://gencourt.state.nh.us/rsa/html/l/21-O/21-O-9.htm</a>; see also <a href="http://www.des.state.nh.us/councils/#waste">http://www.des.state.nh.us/rules/env-wmc200.pdf</a> and <a href="http://www.des.state.nh.us/councils/#waste">http://www.des.state.nh.us/councils/#waste</a>)

Additional information: N. H. DES, Oil Remediation and Compliance Bureau, (603) 271-3644

N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

U. S. EPA, Office of Underground Storage Tanks, (617) 918-1311



# **Underground Storage Tank Facility Registration** – Work Sheet

<u>Key Qualifier Questions:</u> Does your facility have an underground tank system storing a regulated substance and having a capacity of more than 110 gallons? Does your facility have a non-residential underground tank system storing on-premise use heating oil with a capacity of more than 1,100 gallons?

\*Note: The term "regulated substance" means oil or a hazardous substance. The term "oil", as defined in RSA 146-C:1, XII (which refers to RSA 146-A:2, III, "Oil Discharge or Spillage in Surface Water or Groundwater/Definitions", http://gencourt.state.nh.us/rsa/html/X/146-A/146-A-2.htm) and used herein, means petroleum products and their by-products of any kind, and in any form including, but not limited to, petroleum, fuel, sludge, crude, oil refuse or oil mixed with wastes and all other liquid hydrocarbons regardless of specific gravity and which are used as motor fuel, lubricating oil, or any oil used for heating or processing. The term "oil' shall not include natural gas, liquefied petroleum gas or synthetic natural gas regardless of derivation or source. The term "hazardous substance" as defined by RSA 146-C:1, VII-a ("Underground Storage Facilities", http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-1.htm) and used herein, means material defined as a regulated substance under 42 U.S.C. 6991(2)(A) ["Comprehensive Environmental Response, Compensation, and Liability Act/Definitions and Exemptions", <a href="http://www4.law.cornell.edu/uscode/42/6991.html">http://www4.law.cornell.edu/uscode/42/6991.html</a>] in addition to any material designated as a hazardous substance pursuant to RSA 146-C:9. VI-a ["Underground Storage Facilities/Rulemaking", <a href="http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-9.htm">http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-9.htm</a>]. A list of hazardous 40 substances can be found in CFR 302.4 (see http://www.access.gpo.gov/nara/cfr/cfrhtml 00/Title 40/40cfr302 00.html).

#### What must you do to apply?

- Obtain a *Registration for Underground Storage Tank Systems* form from the DES Oil Remediation and Compliance Bureau, the DES Public Information and Permitting Unit, or access it online at <a href="http://www.des.state.nh.us/orcb/doclist/registra.pdf">http://www.des.state.nh.us/orcb/doclist/registra.pdf</a>.
- Provide the name, address, and daytime telephone number of the facility owner.
- Provide the name and street address of the facility.
- Provide the type of owner (e.g., federal/state/local government/political subdivision, commercial, or other) and type of facility (e.g., gas station, petroleum distributor, air taxi, railroad, etc.)
- Provide the name, title, address, and telephone number of the contact person in charge of the UST systems.
- Provide a description of each UST system at the facility, including:
  - Status of UST system
  - Installation date of UST system
  - Capacity of UST(s)
  - Substance(s) stored
  - Tank and piping material
  - Type of piping system
  - Date spill bucket installed
  - Type of overfill, release detection, and corrosion protection
- Provide the owner's financial responsibility compliance status.
- Indicate the number of tanks that are permanently or temporarily closed (as appropriate).
- Provide a detailed site plan and layout.
- Indicate whether the registration is being submitted to signal a change in ownership or a modification to existing systems.
- The facility owner must sign and date the registration form as a *Certification of Compliance*.
- Submit the completed registration form and all supporting information to: Oil Remediation and Compliance Bureau, Waste Management Division, New Hampshire Department of Environmental



Services, P. O. Box 95, 6 Hazen Drive, Concord, NH 03302-0095. Telephone: (603) 271-3644; fax: (603) 271-2181; or online: <a href="http://www.des.state.nh.us/orcb">http://www.des.state.nh.us/orcb</a>

#### What types of projects require this registration?

- All underground storage systems storing a regulated substance with a capacity of more than 110 gallons
- All non-residential underground storage systems storing on-premise use heating oil with a capacity of more than 1,100 gallons

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If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at <a href="mailto:tdrew@des.state.nh.us">tdrew@des.state.nh.us</a> or at (603) 271-3306.



# Construction of a New or Substantially Modified Underground Storage Facility/Letter of Approval

Introduction: DES regulates underground storage tank ("UST") facilities for storage of regulated substances pursuant to RSA 146-C.\* The UST Program is specifically designed to prevent contamination of the land and waters of the state due to accidental or non-sudden (i.e., gradual) releases of stored petroleum products (e.g., motor fuels, heating oils, lubricating oils, and petroleum-contaminated liquids) and hazardous substances. Included in this program is regulation of the construction of new or substantially modified USTs and UST facilities, which applies to UST facilities having a total regulated substance (e.g., gasoline) storage capacity of more than 110 gallons or non-residential tank systems having an on-premise use heating oil storage capacity of more than 1,100 gallons. An approval to construct certain UST facilities must be obtained from DES to ensure that USTs/UST facilities are designed and installed properly to minimize the chance of petroleum discharges to the environment. A significant portion of the rules adopted by DES to supplement the requirements of RSA 146-C address the proper installation of new or substantially modified UST facilities (see http://www.des.state.nh.us/orcb/doclist/1401.pdf). At least 90 days prior to commencing construction or installation of a new or replacement UST system that has an oil storage capacity of more than 110 gallons of motor fuel (e.g., gasoline diesel, waste oil), or 1,100 gallons of heating oil (e.g., #2, #4, #6), the owner must submit complete plans and specifications to DES pursuant to RSA 146-C:7, I ("Underground Storage Facilities/New Facilities", http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-7.htm) that have been prepared and stamped by a registered professional engineer licensed to practice in the state of New Hampshire (see http://www.des.state.nh.us/orcb/doclist/usteng.pdf). The DES application form (Application for the Construction and Substantially Modified Underground Storage (http://www.des.state.nh.us/orcb/doclist/ustappli.pdf) can be used as a checklist to identify the information which must be provided relative to the plans and specifications for tank and piping standards, secondary containment for the tank(s) and piping, spill containment and overfill protection, and leak monitoring for the tank(s) and piping. Within 90 days of receipt of the application. DES is required to issue either a letter of incompleteness or a letter of approval. An approval is valid for one year from its date of issuance. If construction of the tank system installation is not completed within one year, the approval will expire.

\*Note: The term "regulated substance" means oil or a hazardous substance. The term "oil", as defined in RSA 146-C:1, XII (which refers to RSA 146-A:2, III, "Oil Discharge or Spillage in Surface Water or Groundwater/Definitions", http://gencourt.state.nh.us/rsa/html/X/146-A/146-A-2.htm) and used herein, means petroleum products and their by-products of any kind, and in any form including, but not limited to, petroleum, fuel, sludge, crude, oil refuse or oil mixed with wastes and all other liquid hydrocarbons regardless of specific gravity and which are used as motor fuel, lubricating oil, or any oil used for heating or processing. The term "oil" shall not include natural gas, liquefied petroleum gas or synthetic natural gas regardless of derivation or source. The term "hazardous substance" as defined by RSA 146-C:1, VII-a ("Underground Storage Facilities", http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-1.htm) and used herein, means material defined as a regulated substance under 42 U.S.C. 6991(2)(A) ["Comprehensive Environmental Response, Compensation, and Liability Act/Definitions and Exemptions", <a href="http://www4.law.cornell.edu/uscode/42/6991.html">http://www4.law.cornell.edu/uscode/42/6991.html</a>] in addition to any material designated as a hazardous substance pursuant to RSA 146-C:9, VI-a ["Underground Storage" Facilities/Rulemaking", <a href="http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-9.htm">http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-9.htm</a>]. A list of hazardous be found **CFR** 302.4 can in http://www.access.gpo.gov/nara/cfr/cfrhtml 00/Title 40/40cfr302 00.html).

Average number of approvals issued annually: Approximately 130

**Fee:** \$100 for any person submitting plans and specifications for a new facility, except state and local governments and other political subdivisions. The fee is used to help cover the costs of reviewing plans and specifications and conducting inspections during installation. The fee is deposited with the State Treasurer as unrestricted revenues (see RSA 146-C:7, I-a, "Underground Storage Facilities/New Facilities",



http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-7.htm and http://www.des.state.nh.us/factsheets/oil/oil-3.htm).

Estimated processing time after application is deemed "complete": 90 days

**Approval duration:** One year

Approval transferability: If a transfer of ownership for an UST facility is to occur prior to construction being complete. the new owner must file amended registration form (see an http://www.des.state.nh.us/orcb/doclist/registra.pdf) with DES no later than ten days after the transfer. The seller must deliver to the buyer all documents and information related to the facility including inventory, new installations, testing, closure or removals, lining, monitoring, sampling and analysis, site assessments, equipment maintenance, repairs, compliance history, financial responsibility, and any other records required to be maintained by NH CODE ADMIN. RULES Env-Wm 1401. The existing approval letter to construct an UST system is valid for one year from its date of issuance, whether for the original or new owner.

**Approval modification:** Modifications to the approved plans are not allowed, in accordance with Env-Wm 1401.20(c), unless the proposed changes are submitted to and approved by DES prior to implementation.

**Approval renewal:** An approval letter is valid for one year and is not renewable. If construction is not complete within one year, an application for a new approval must be filed.

**State statute:** RSA 146-C ("Underground Storage Facilities", <a href="http://gencourt.state.nh.us/rsa/html/indexes/146-C.html">http://gencourt.state.nh.us/rsa/html/indexes/146-C.html</a>)

**N. H. Code of Administrative Rules:** Env-Wm 1401 ("Underground Storage Facilities", <a href="http://www.des.state.nh.us/orcb/doclist/1401.pdf">http://www.des.state.nh.us/orcb/doclist/1401.pdf</a>)

**Appeals body:** Waste Management Council at RSA 21-O:9 ("Department of Environmental Services/Waste Management Council", <a href="http://gencourt.state.nh.us/rsa/html/l/21-O/21-O-9.htm">http://gencourt.state.nh.us/rsa/html/l/21-O/21-O-9.htm</a>; see also <a href="http://www.des.state.nh.us/councils/#waste">http://www.des.state.nh.us/rules/env-wmc200.pdf</a> and <a href="http://www.des.state.nh.us/councils/#waste">http://www.des.state.nh.us/councils/#waste</a>)

Additional information: N. H. DES, Oil Remediation and Compliance Bureau, (603) 271-3644

N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

U. S. EPA, Office of Underground Storage Tanks, (617) 918-1311



# Construction of a New or Substantially Modified Underground Storage Facility/Letter of Approval – Work Sheet

<u>Key Qualifier Question:</u> Do you plan to install a new underground storage tank ("UST") system for regulated substances, or replace or substantially modify an existing system that has a storage capacity for a regulated substance (e.g., gasoline) of more than 110 gallons, or a capacity of more than 1,100 gallons for non-residential storage of heating oil (e.g., #2, #4, or #6) for on-premise use?

Note: The term "regulated substance" means oil or a hazardous substance. The term "oil", as defined in RSA 146-C:1, XII (which refers to RSA 146-A:2, III, "Oil Discharge or Spillage in Surface Water or Groundwater/Definitions", http://gencourt.state.nh.us/rsa/html/X/146-A/146-A-2.htm) and used herein, means petroleum products and their by-products of any kind, and in any form including, but not limited to, petroleum, fuel, sludge, crude, oil refuse or oil mixed with wastes and all other liquid hydrocarbons regardless of specific gravity and which are used as motor fuel, lubricating oil, or any oil used for heating or processing. The term oil" does not include natural gas, liquefied petroleum gas or synthetic natural gas regardless of derivation or source. The term "hazardous substance" as defined by RSA 146-C:1, VII-a ("Underground Storage Facilities", http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-1.htm) and used herein, means material defined as a regulated substance under 42 U. S. C. 6991(2) (A) ["Comprehensive Environmental Response, Compensation, and Liability Act/Definitions and Exemptions", <a href="http://www4.law.cornell.edu/uscode/42/6991.html">http://www4.law.cornell.edu/uscode/42/6991.html</a>] in addition to any material designated as a hazardous substance in RSA 146-C:9. VI-a ["Underground Storage Facilities/Rulemaking", <a href="http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-9.htm">http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-9.htm</a>]. A list of hazardous be found substances can in the Code of Federal Regulations at 40 CFR 302.4 http://www.access.gpo.gov/nara/cfr/cfrhtml 00/Title 40/40cfr302 00.html).

#### What must you do to apply?

- At least 90 days prior to construction or installation of an underground petroleum storage tank ("UST") system, obtain a DES Application for the Construction of New and Substantially Modified Underground Storage Facilities from the DES Oil Remediation and Compliance Bureau, DES Public Information Center, or online at http://www.des.state.nh.us/orcb/doclist/ustappli.pdf.
- Provide all existing facility and tank information, including any UST facility identification number.
- Provide notification to the host community pursuant to RSA 541-A:39 ("Administrative Procedure Act/Notice to Municipalities", <a href="http://gencourt.state.nh.us/rsa/html/LV/541-A/541-A-39.htm">http://gencourt.state.nh.us/rsa/html/LV/541-A/541-A-39.htm</a>)
- Prepare a facility plan that is dated and signed by a registered professional engineer licensed to practice in the state of New Hampshire (see NH CODE ADMIN. RULE Env-Wm 1401.20, ("Underground Storage Facilities/Requirements for Approval of Underground Storage Systems", http://www.des.state.nh.us/orcb/doclist/1401.pdf) including:
  - An accurate diagram (22" x 34") showing tank(s) location, all piping, pump islands, structures, appurtenances, North arrow, 100-year flood plain information, the seasonal high water table, and spot elevations (dispenser/tank)
  - A detailed tank diagram (22" x 34") showing spill containment, leak detection, product pipe (indicate slope), piping termination details, flex connectors, pipe cover depth (inches) and material(s) specifications, complete engineering designs and documentation for tank ballasting, and appurtenances
  - Other supporting documentation on equipment and materials as necessary to describe the facility
- Provide a site location (locus) map or U. S. Geological Survey 7.5-minute series map (see <a href="http://www.topozone.com">http://www.topozone.com</a>) that clearly identifies the facility's location.
- Supply all information related to the tank(s) (see Env-Wm 1401.21) including:
  - Whether the work is for piping upgrades



- Number of existing tanks to be closed (if any)
- The volume (nominal/actual), diameter, and length of the tank(s)
- Product to be stored
- Manufacturer and type of construction
- Degree of wrap (double-walled)
- Outer wall gauge (steel only)
- o Material specifications, construction, and installation details for the vault
- State whether or not dewatering is required.
- Provide all information related to the system's leak monitoring system (see Env-Wm 1401.26) including:
  - Manufacturer and model number for the console's tank monitor and sump monitor
  - o Manufacturer and model number for the sensor tank's hydrostatic, wet annular, liquid, dry annular, vapor, dry annular, tank gauging, and any other important components.
- Provide information on the system's spill containment capability (see Env-Wm 1401.25) including:
  - Manufacturer, model number, and capacity of the spill container, submerged fill drop tube, and any other components to the system.
- Provide information on the system's overfill protection capability (see Env-Wm 1401-25) including:
  - Manufacturer, model number, and volume stopped/restricted (gal.) of the ball float, float vent valve extractor, audible alarm level sensor, overfill flow shut-off valve, and any other pertinent information related to overfill protection.
  - o If overfill flow shut-off valve is used, attached completed manufacturer's instructions for determining the proper length of the tube and indicate the proper valve dimension setting on the plan.
- For the system's piping (see Env-Wm 1401.22 and Env-Wm 1401.27) include:
  - The pressure or suction (or both) for the primary piping, plus the manufacturer name, model number, material of construction, pipe size and schedule, and any other pertinent information for the primary and secondary piping.
  - Location of check valves
  - Components which provide for independent pressure testing of the tank and piping
  - o The manufacturer, model number, material and pipe size for primary and secondary return lines
  - The manufacturer name, model number, and material for the containment sump for the tank and dispenser
  - o The number of sump sensors for the tank and dispenser, their manufacturer, and model number
  - o The manufacturer and model number for the line leak detector
- Identify whether any tanks are siphoned. If so, provide:
  - o Manufacturer, model number, material of construction, pipe and schedule for the primary and secondary piping.
  - Manufacturer and model number for the flex connectors.
  - State whether the flex connectors are cathodically-protected and totally isolated from the soil or backfill material.
- Provide the setback distances from water supply wells and surface water [see Env-Wm 1401.28 (t) and (u)], including:
  - Distance from large community or non-transient, non-community water supply system wells
  - Distance from small community or non-transient, non-community water supply system wells
  - Distance from private water supply systems
- Provide the name, company, telephone number, and New Hampshire Professional Engineer Number for the engineer of record (see <a href="http://www.des.state.nh.us/orcb/doclist/usteng.pdf">http://www.des.state.nh.us/orcb/doclist/usteng.pdf</a>), plus the name, company, International Fire Code Institute ("IFCI") Certification Number (see <a href="http://www.ifci.org/wsnsa.dll/certsearch.w?OrgCode=ifci">http://www.ifci.org/wsnsa.dll/certsearch.w?OrgCode=ifci</a>), address, town/city, state, zip code, and telephone number for the contractor/installer.
- Submit a check or money order for \$100 made payable to "Treasurer, State of New Hampshire, with the application, plans, and specifications to: Oil Remediation and Compliance Bureau, Waste



Page 362

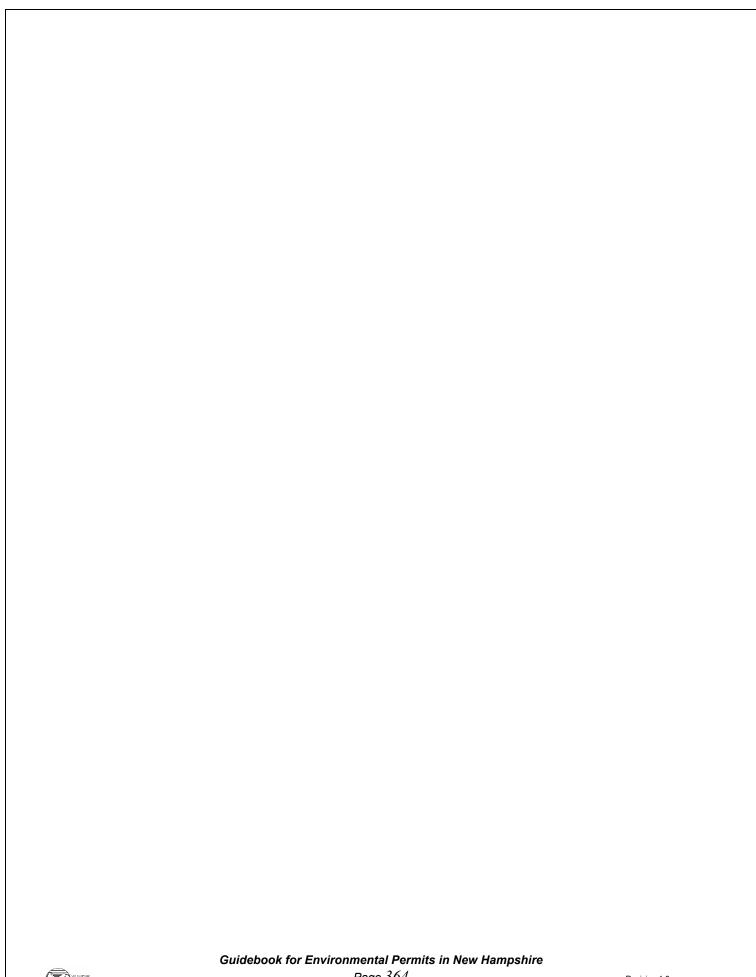
Management Division, New Hampshire Department of Environmental Services, P. O. Box 95, 6 Hazen Drive, Concord, NH 03302-0095. Telephone: (603) 271-3644; fax: (603) 271-2181; or online: http://www.des.state.nh.us/orcb/ustprog.htm.

#### What types of projects require this approval?

- ❖ Installation or replacement of an UST system of more than 110 gallons at a service station
- ❖ Installation or replacement of an UST system at a manufacturing facility of more than 1,100 gallons of heating oil (e.g., #2, #4, or #6)

If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at <a href="mailto:tdrew@des.state.nh.us">tdrew@des.state.nh.us</a> or at (603) 271-3306.







## **Underground Storage Tank Facility Permit-to-Operate**

**Introduction:** DES regulates underground storage tank ("UST") facilities for storage of regulated substances pursuant to RSA 146-C.\* One of the aspects of this program is the UST Permit-to-Operate, which applies to UST facilities having a total regulated substance (e.g., gasoline) storage capacity of more than 110 gallons or non-residential tank systems having an on-premise use heating oil storage capacity of more than 1,100 gallons. Pursuant to RSA 146-C:4, I ("Underground Storage Facilities/Underground Storage Facility Permit Required", <a href="http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-4.htm">http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-4.htm</a>), no person can own or operate an UST facility in New Hampshire with out first obtaining a permit from DES. A Permit-to-Operate is issued within 90 days of receipt of a complete UST registration package (refer to the UST Facility Registration description elsewhere in this chapter), including payment of the fee required by RSA 146-C:4, III, and is valid for five years. The UST Program was specifically designed to prevent and minimize contamination of the land and waters of the state due to accidental or non-sudden (*i.e.*, gradual) releases of stored motor fuels, heating oils, lubricating oils, other petroleum and petroleum-contaminated liquids, and hazardous substances to the subsurface environment as a result of improper storage, maintenance, and/or handling practices.

\*Note: The term "regulated substance" means oil or a hazardous substance. The term "oil", as defined in RSA 146-C:1, XII (which refers to RSA 146-A:2, III, "Oil Discharge or Spillage in Surface Water or Groundwater/Definitions", http://gencourt.state.nh.us/rsa/html/X/146-A/146-A-2.htm) and used herein, means petroleum products and their by-products of any kind, and in any form including, but not limited to, petroleum, fuel, sludge, crude, oil refuse or oil mixed with wastes and all other liquid hydrocarbons regardless of specific gravity and which are used as motor fuel, lubricating oil, or any oil used for heating or processing. The term "oil' shall not include natural gas, liquefied petroleum gas or synthetic natural gas regardless of derivation or source. The term "hazardous substance" as defined by RSA 146-C:1, VII-a ("Underground Storage Facilities", http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-1.htm) and used herein, means material defined as a regulated substance under 42 U.S.C. 6991(2)(A) ["Comprehensive Environmental Response, Compensation, and Liability Act/Definitions and Exemptions", http://www4.law.cornell.edu/uscode/42/6991.html] in addition to any material designated as a hazardous substance pursuant to RSA 146-C:9, VI-a ["Underground Storage Facilities/Rulemaking", http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-9.htm]. A list of hazardous can be found in 40 **CFR** 302.4 substances (see http://www.access.gpo.gov/nara/cfr/cfrhtml 00/Title 40/40cfr302 00.html).

#### Average number of Permits-to-Operate issued annually: Approximately 400

**Fees:** \$350 for each regulated, non-residential UST facility for the five-year permit prior to issuance of a DES Permit-to-Operate. Facilities owned by state and local governments, including counties and school districts, are not required to pay the permit fee but <u>are</u> required to apply for the Permit-to-Operate every five years (see <a href="http://www.des.state.nh.us/factsheets/oil/oil-3.htm">http://www.des.state.nh.us/factsheets/oil/oil-3.htm</a>).

Estimated processing time after application is deemed "complete": 30 days

**Permit-to-Operate duration:** 5 years

**Permit-to-Operate transferability:** When transferring the UST facility to a new owner, the current owner must notify the buyer of the facility's status of compliance and the buyer must file an amended registration (see <a href="http://www.des.state.nh.us/orcb/doclist/registra.pdf">http://www.des.state.nh.us/orcb/doclist/registra.pdf</a>) with the DES within ten days. An amended Permit-to-Operate will be issued to the new owner.

**Permit-to-Operate modification:** A Permit-to-Operate is issued in the name of the facility and its owner. Submittal of an amended registration must provide sufficient information and data for DES to render a decision on an amended Permit-to-Operate.



**Permit-to-Operate renewal:** Permits must be renewed every five years. Please note the following renewal schedule (by county):

UST Facility Location	Expiration Date
Belknap County, Merrimack County	April 30, 2007
Rockingham County	April 30, 2003
Coös County, Carroll County, Grafton County	April 30, 2004
Cheshire County, Sullivan County, Strafford County	September 30, 2005
Hillsborough County	April 30, 2006

**State statute:** RSA 146-C ("Underground Storage Facilities", <a href="http://gencourt.state.nh.us/rsa/html/indexes/146-C.html">http://gencourt.state.nh.us/rsa/html/indexes/146-C.html</a>)

**N. H. Code of Administrative Rules:** Env-Wm 1401 ("Underground Storage Facilities", <a href="http://www.des.state.nh.us/orcb/doclist/1401.pdf">http://www.des.state.nh.us/orcb/doclist/1401.pdf</a> and Summary of New Hampshire UST Regulations, <a href="http://www.des.state.nh.us/factsheets/oil/oil-11.htm">http://www.des.state.nh.us/factsheets/oil/oil-11.htm</a>)

**Appeals body:** Waste Management Council at RSA 21-O:9 ("Department of Environmental Services/Waste Management Council", <a href="http://gencourt.state.nh.us/rsa/html/l/21-O/21-O-9.htm">http://gencourt.state.nh.us/rsa/html/l/21-O/21-O-9.htm</a>; see also <a href="http://www.des.state.nh.us/councils/#waste">http://www.des.state.nh.us/rules/env-wmc200.pdf</a> and <a href="http://www.des.state.nh.us/councils/#waste">http://www.des.state.nh.us/councils/#waste</a>)

Additional information: N. H. DES, Oil Remediation Compliance Bureau, (603) 271-3644

N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

U. S. EPA, Office of Underground Storage Tanks, (617) 918-1311



# **Underground Storage Tank Facility Permit-to-Operate – Work Sheet**

<u>Key Qualifier Questions:</u> Will your facility have at least one underground tank with the capacity to store more than 110 gallons of motor fuel (gasoline, diesel, waste oil, etc.)? Will your non-residential facility have at least one underground tank with the capacity to store more than 1,100 gallons of heating oil (e.g., #2, #4, and #6 oils)? Will your facility have at least one underground tank with the capacity to store more than 110 gallons of a hazardous substance?

\*Note: The term "regulated substance" means oil or a hazardous substance. The term "oil", as defined in RSA 146-C:1, XII (which refers to RSA 146-A:2, III, "Oil Discharge or Spillage in Surface Water or Groundwater/Definitions", http://gencourt.state.nh.us/rsa/html/X/146-A/146-A-2.htm) and used herein, means petroleum products and their by-products of any kind, and in any form including, but not limited to, petroleum, fuel. sludge. crude, oil refuse or oil mixed with wastes and all other liquid hydrocarbons regardless of specific gravity and which are used as motor fuel, lubricating oil, or any oil used for heating or processing. The term "oil" shall not include natural gas, liquefied petroleum gas or synthetic natural gas regardless of derivation or source. The term "hazardous substance" as defined by RSA 146-C:1, VII-a ("Underground Storage Facilities", http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-1.htm) and used herein, means material defined as a regulated substance under 42 U.S.C. 6991(2)(A) ["Comprehensive Environmental Response, Compensation, and Liability Act/Definitions and Exemptions", http://www4.law.cornell.edu/uscode/42/6991.html] in addition to any material designated as a hazardous substance pursuant to RSA 146-C:9, VI-a ["Underground Storage" Facilities/Rulemaking", http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-9.htm]. A list of hazardous be 40 CFR substances can found in 302.4 (see http://www.access.gpo.gov/nara/cfr/cfrhtml 00/Title 40/40cfr302 00.html).

#### What must you do to apply?

#### For initial Permits-to-Operate:

- Register the facility (refer to the Underground Storage Tank Facility Registration description provided elsewhere in this chapter). For UST facilities owned by government agencies and political subdivisions, the Permit-to-Operate will be issued within 90 days of receiving a complete registration package.
- For all other UST facilities, pay the fee required by RSA 146-C:4, III ("Oil Discharge or Spillage in Surface Water or Groundwater/Definitions", <a href="http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-4.htm">http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-4.htm</a>):
  - A permit fee of \$70 per year must be paid to DES by the owner or operator of each permitted facility, except for facilities owned by state and local governments, including counties and school districts, or other political subdivisions (see the DES Fact Sheet entitled *Underground Storage Tank Facility Fee Schedule*, <a href="http://www.des.state.nh.us/factsheets/oil/oil-3.htm">http://www.des.state.nh.us/factsheets/oil/oil-3.htm</a>). All fees will be deposited with the State Treasurer as unrestricted revenue and are due in accordance with the following schedule:

	Expiration Date/		
County	Renewal Fee Due Date	Amount Due*	Effective Dates
Belknap	April 30, 2007	\$350	2007-2012
Carroll	April 30, 2004	\$350	2004-2009
Cheshire	September 30, 2005	\$350	2005-2010
Coös	April 30, 2004	\$350	2004-2009
Grafton	April 30, 2004	\$350	2004-2009
Hillsborough	April 30, 2006	\$350	2006-2011
Merrimack	April 30, 2007	\$350	2007-2012
Rockingham	April 30, 2003	\$350	2003-2008
Strafford	September 30, 2005	\$350	2005-2010
Sullivan	September 30, 2005	\$350	2005-2010

\*Note: Existing facilities with unpaid permit fees from 1990 to the present must be paid up-to-date.



 The Permit-to-Operate will be issued within 90 days of receiving a complete registration package and fee.

#### For renewal of existing Permits-to-Operate:

- Check the DES "One-Stop" database to ensure that the facility is properly registered (see <a href="http://www.des.state.nh.us:1522/des/onestop.des menu.show">http://www.des.state.nh.us:1522/des/onestop.des menu.show</a>). If it is not, proceed as for initial Permits-to-Operate (see above).
- For UST facilities owned by a government agency or political subdivision, DES will provide a notice to renew the Permit-to-Operate and a request to prepare and sign a *Certificate of Compliance*.
- For all other UST facilities, DES will provide a notice to renew the Permit-to-Operate along with an invoice, as well as a request to prepare and sign a *Certificate of Compliance*.
- Prepare and sign the *Certificate of Compliance* located on the lower half of the *Permit-to-Operate Renewal Application*. Compliance should be determined by conducting an UST facility compliance audit or by securing the services of a third party professional consultant familiar with UST compliance audits. An audit checklist is provided with the *Permit-to-Operate Invoice* (see *Underground Storage Facility Compliance Audit Checklist for Third Party Inspections*, <a href="http://www.des.state.nh.us/orcb/doclist/cac.pdf">http://www.des.state.nh.us/orcb/doclist/cac.pdf</a>).
- If the facility is determined to be in compliance with all applicable requirements, sign the bottom half of the *Renewal Application* or *Permit-to-Operate Invoice*, as applicable.
- If the facility is <u>not</u> in compliance, develop a schedule for correcting the non-compliance issues and submit it with the *Renewal Application* or *Permit-to-Operate Invoice*, as applicable.
- Prepare a check or money order in the amount designated on the invoice, made payable to the "Treasurer, State of New Hampshire". <u>Important</u>: Please write the DES "UST Facility Identification Number" on the face of the check or money order.
- Submit the signed *Renewal Application* or *Permit-to-Operate Invoice*, check or money order (if applicable), and compliance schedule (if applicable) to: UST Program, Oil Remediation and Compliance Bureau, Waste Management Division, New Hampshire Department of Environmental Services, 6 Hazen Drive, P. O. Box 95, Concord, New Hampshire 03302-0095. Telephone: (603) 271-3644; fax: (603) 271-2181; or online: http://www.des.state.nh.us/orcb/ustprog.htm

#### What types of projects require this Permit-to-Operate?

- ❖ All non-residential underground heating oil tank systems greater than 1,100 gallons
- ❖ All underground motor fuel tank systems greater than 110 gallons
- All underground regulated hazardous substance tank systems greater than 110 gallons

If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at <a href="mailto:tdrew@des.state.nh.us">tdrew@des.state.nh.us</a> or at (603) 271-3306.



### **Underground Storage Tank Closure Notification**

Introduction: DES regulates underground storage tank ("UST") facilities for storage of regulated substances pursuant to RSA 146-C.\* Pursuant to RSA 146-C:9 ("Underground Storage Facilities/Rulemaking", http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-9.htm), DES has adopted NH CODE ADMIN. RULES Env-Wm 1401 ("Underground Storage Facilities", <a href="http://www.des.state.nh.us/orcb/doclist/1401.pdf">http://www.des.state.nh.us/orcb/doclist/1401.pdf</a>, effective April 22, 1997 which superceded Ws 411 (effective September 17, 1985 through November 1, 1990) and Env-Ws 411 (effective November 2, 1990 through April 21, 1997). The UST Program is specifically designed to prevent contamination of the land and waters of the state due to accidental or non-sudden (i.e., gradual) releases of stored petroleum products (e.g., motor fuels, heating oils, lubricating oils, and petroleum-contaminated liquids) and hazardous substances. Included in this program is the closure of USTs and UST facilities. Pursuant to Env-Wm ("Underground Storage Facilities/Permanent 1401.18(d) http://www.des.state.nh.us/orcb/doclist/1401.pdf, an owner must notify DES at least 30 days before any scheduled UST system closure. Α completed UST Closure Notification (see http://www.des.state.nh.us/orcb/doclist/closerep.pdf) must be submitted to DES. Registered steel UST systems without corrosion protection must be permanently closed on or before 25 years after the date of installation, and all existing single-walled underground storage tank systems without secondary containment and leak monitoring must be permanently closed by December 25, 2015. To close an UST system, all petroleum product, liquid, and sludge must be removed from the system and disposed in accordance with applicable state and federal requirements, all piping must be disconnected and removed (or permanently capped or plugged) after all substances have been removed from the system, and the system must be tested for hazardous or explosive vapors and rendered vapor-free, after which it must be removed or permanently close in-place (if removing the UST system will undermine the integrity of overlying structures or adjacent USTs). A tank that is closed in-place must be filled to capacity (including all voids) with a solid inert material such as clean sand or concrete.

\*Note: The term "regulated substance" means oil or a hazardous substance. The term "oil", as defined in RSA 146-C:1, XII (which refers to RSA 146-A:2, III, "Oil Discharge or Spillage in Surface Water or Groundwater/Definitions", http://gencourt.state.nh.us/rsa/html/X/146-A/146-A-2.htm) and used herein, means petroleum products and their by-products of any kind, and in any form including, but not limited to, petroleum, fuel, sludge, crude, oil refuse or oil mixed with wastes and all other liquid hydrocarbons regardless of specific gravity and which are used as motor fuel, lubricating oil, or any oil used for heating or processing. The term "oil" shall not include natural gas, liquefied petroleum gas or synthetic natural gas regardless of derivation or source. The term "hazardous substance" as defined by RSA 146-C:1, VII-a ("Underground Storage Facilities", http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-1.htm) and used herein, means material defined as a regulated substance under 42 U.S.C. 6991(2)(A) ["Comprehensive Environmental Response, Compensation, and Liability Act/Definitions and Exemptions", http://www4.law.cornell.edu/uscode/42/6991.html] in addition to any material designated as a hazardous substance pursuant to RSA 146-C:9, VI-a ["Underground Storage Facilities/Rulemaking", http://gencourt.state.nh.us/rsa/html/X/146-C/146-C-9.htm]. A list of hazardous found CFR 302.4 (see http://www.access.gpo.gov/nara/cfr/cfrhtml 00/Title 40/40cfr302 00.html).

Average number of tank closure notifications received annually: Approximately 200

Fees: None

Estimated processing time after notification is deemed "complete": 5 days

**Notification duration:** Applicable until actual closure is complete

**Notification transferability:** Closure notifications are for specific tanks at a facility and are not transferable.



**Notification modification:** DES must be notified of any changes to the closure information.

Notification renewal: Not applicable

State statute: RSA 146-C ("Underground Storage Facilities", <a href="http://gencourt.state.nh.us/rsa/html/indexes/146-6">http://gencourt.state.nh.us/rsa/html/indexes/146-6</a>

C.html)

N. H. Code of Administrative Rules: Env-Wm 1401 ("Underground Storage Facilities",

http://www.des.state.nh.us/orcb/doclist/1401.pdf)

**Appeals body:** Waste Management Council at RSA 21-O:9 ("Department of Environmental Services/Waste Management Council", <a href="http://gencourt.state.nh.us/rsa/html/l/21-O/21-O-9.htm">http://gencourt.state.nh.us/rsa/html/l/21-O/21-O-9.htm</a>; see also <a href="http://www.des.state.nh.us/councils/#waste">http://www.des.state.nh.us/rules/env-wmc200.pdf</a> and <a href="http://www.des.state.nh.us/councils/#waste">http://www.des.state.nh.us/councils/#waste</a>)

Additional information: N. H. DES, Oil Remediation and Compliance Bureau, (603) 271-3644

N. H. DES, Public Information Center, (603) 271-2975 or (603) 271-8876

U. S. EPA, Office of Underground Storage Tanks, (617) 918-1311



## **Underground Storage Tank Closure Notification** – Work Sheet

**<u>Key Qualifier Question:</u>** Do you plan to permanently close an underground petroleum storage tank ("UST") system?

Note: If temporary closure of an UST system is contemplated, it must be carried out in accordance with NH CODE ADMIN. RULE Env-Wm 1401.17 ("Underground Storage Facilities/Temporary Closure", http://www.des.state.nh.us/orcb/doclist/1401.pdf). If permanent closure of an UST system is planned, the process to be followed is outlined in Env-Wm 1401.18 and as described below. Registered steel underground storage tank systems without corrosion protection must be permanently closed on or before 25 years after the date of installation. When the date of installation is unknown, the system must have been permanently closed by October 1, 1995. All existing single-walled underground storage tank systems without secondary containment and leak monitoring must be permanently closed by December 22, 2015. When a tank system subject to Env-Wm 1401 regulation is discovered, the owner must register the facility in accordance with Env-Wm 1401.04 and, within 30 days from registration, close the tank system in accordance with Env-Wm 1401.18 ("Underground Storage Facilities/Permanent Closure", http://www.des.state.nh.us/orcb/doclist/1401.pdf).

#### What must you do to apply?

- Obtain a copy of the UST Closure Notification form from the DES Oil Remediation and Compliance Bureau, DES Public Information Center, or access it online at http://www.des.state.nh.us/orcb/doclist/closerep.pdf.
- At least 30 days prior to any scheduled system closure, provide the following closure notification information:
  - o Facility identification number, name, street address, and telephone number
  - o Facility owner name and telephone number
  - Tank size and product stored
  - Name of the consultant/contractor hired to do the work
  - Confirmation that the local fire department has been notified of the closure
- Ensure that the person hired to permanently close the UST system has been certified in underground storage tank decommissioning by the International Fire Code Institute ("IFCI") (see <a href="http://www.ifci.org/wsnsa.dll/certsearch.w?OrgCode=ifci">http://www.ifci.org/wsnsa.dll/certsearch.w?OrgCode=ifci</a>), and that the certified tank remover will comply with safety and testing requirements such as the American Petroleum Institute's ("API") 1604 (Closure of Unlined Petroleum Storage Tanks), API 1631 (Interior Lining and Periodic Inspection of Underground Storage Tanks), and API 2015 (Safe Entry and Cleaning of Petroleum Storage Tanks). See <a href="http://www.global.ihs.com/">http://www.global.ihs.com/</a> to purchase these API standards.
- Remove all product, liquid, and sludge from the system(s) and disposed of it appropriately; disconnect and remove all piping or permanently cap or plug the piping; and test the system for hazardous or explosive vapors and render it vapor-free or inert of such vapors.
- Remove the UST or, if removal would undermine the integrity of overlying structures or adjacent USTs, close the UST in-place. An UST closed in-place must be filled to capacity, including all voids within each tank, with a solid inert material such as sand or concrete.
- Conduct an assessment to determine whether any residual contamination is present by digging test pits
  and obtaining and analyzing representative soil and groundwater samples from beneath and adjacent
  to the UST and its piping, and from existing release detection devices or subsurface monitoring
  locations.
- Screen the excavation material from the UST location for contamination by collecting samples and submitting them to a New Hampshire-certified laboratory for analysis (refer to the New Hampshire Environmental Laboratory Accreditation Program presented in the "Drinking Water" chapter of this *Guidebook*, http://www.des.state.nh.us/nhelap/).
- Submit a closure report (see <a href="http://www.des.state.nh.us/orcb/doclist/clodoc.pdf">http://www.des.state.nh.us/orcb/doclist/clodoc.pdf</a>) to DES within 30 days from the time of samples being taken that contains the results of all testing and analysis noted above.



Page 371

- If soil or groundwater contamination from a regulated substance is detected by observation or analysis during the closure of an UST system, immediately notify DES pursuant to RSA 146-A:5, II ("Oil Discharge or Spillage in Surface Water or Groundwater/Duty to Report", <a href="http://gencourt.state.nh.us/rsa/html/X/146-A/146-A-5.htm">http://gencourt.state.nh.us/rsa/html/X/146-A/146-A-5.htm</a> <a href="http://www.des.state.nh.us/factsheets/oil/oil-5.htm">http://www.des.state.nh.us/factsheets/oil/oil-5.htm</a>).
- DO NOT backfill the excavation or remove the closed UST from the site until DES has inspected the
  site. If DES is unable to conduct such a site inspection within seven days, it may grant permission for a
  consultant or person knowledgeable in site assessments for contamination to inspect the site, submit a
  report containing a detailed account of the soil and groundwater inspection in the vicinity of the tank
  and piping, and inspect the closed tank for evidence of corrosion and leakage within 30 days of the
  inspection (see <a href="http://www.des.state.nh.us/orcb/doclist/ust\_list.pdf">http://www.des.state.nh.us/orcb/doclist/ust\_list.pdf</a>).
- UST systems that have not been permanently closed are subject to all requirements of Env-Wm 1401.
- The facility owner must retain all documents pertaining to the closure of the UST or UST system, including contractors' invoices, manifests for disposal of materials, testing and analytical reports, and any other documents generated from the closure, for three years from the date of closure. These documents must be transferred to the new owner at the time of a transfer of facility ownership.
- Submit the UST Closure Notification and all supporting materials to: Oil Remediation and Compliance Bureau, Waste Management Division, New Hampshire Department of Environmental Services, P. O. Box 95, 6 Hazen Drive, Concord, NH 03302-0095. Telephone: (603) 271-3644; fax: (603) 271-2181; or online: <a href="http://www.des.state.nh.us/orcb/ustprog.htm">http://www.des.state.nh.us/orcb/ustprog.htm</a>

#### What types of projects require this closure notification?

- ❖ All underground storage systems that store a regulated substance (e.g., gasoline, oil, etc.) with a capacity of greater than 110 gallons
- ❖ All non-residential (*i.e.*, commercial and industrial) underground storage systems that store on-premise heating oil (*e.g.*, #2, #4, and #6) with a capacity of greater than 1,100 gallons

If there are questions regarding this page or any other section of the Guidebook, please contact Tim Drew, Administrator, Public Information and Permitting Unit, at <a href="mailto:tdrew@des.state.nh.us">tdrew@des.state.nh.us</a> or at (603) 271-3306.

